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09/834,255	04/12/2001	Peter Alexander Grossman	70006210-1	2741

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EXAMINER	
AMINI, JAVID A	

ART UNIT	PAPER NUMBER
2672	6

DATE MAILED: 11/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/834,255	GROSSMAN, PETER ALEXANDER	
	Examiner	Art Unit	
	Javid A Amini	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

Response to Arguments

Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground of rejection (by adding a new prior art from "PTO-892", mailed on 04/09/2003).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-15 rejected under 35 U.S.C. 103(a) as being unpatentable over Sciammarella et al. (hereinafter, referred as Scia), and further view of DeLorme et al. (hereinafter referred as a DeLorme).

1. Claim 1.

"A system for manipulating an image on a screen, said system comprising: a touch-sensitive screen for displaying said image; a stylus for indicating a point on said screen by touching said screen; and generating means for generating said image on said screen, said generating means including a dynamic zoom means for carrying out a zoom action on said image on said screen; wherein said zoom means detects a point indicated by said stylus on said screen, and repeatedly performs a zoom action on said image on said screen using said detected point as the center of said zoom action until said stylus is removed from said screen", Scia on col. 5, lines 29-34 discloses that the operations may be performed on a general-purpose personal computer

programmed to perform the operations in accordance with the present invention and equipped with an input device such as a mouse, light-pen, touch-screen display, remote control device, etc., and a display monitor. Scia on col. 1, lines 22-25 discloses that is well known that via the user interface the user can, for example, view, manipulate, etc. images and graphical objects on a display screen via an input device such a mouse, light pen, keyboard, joystick, etc. And also Scia on col. 5, lines 14-18 discloses the conventional technique that provides a one-button, single operation that can be performed using the input device 112. The above-described dynamic control of direction and speed in zooming-in/out further enhances the graphical user interface. Scia in Fig. 3, illustrates that the cursor 116 is located substantially near or at the reference location 122. While holding the mouse button depressed (or alternatively, by clicking on the mouse button), the user can move the cursor 116 away from the reference location 122 in any direction on the display screen 102. For example, by operating the input device 112, the cursor 116 can be moved in north, south, east and west directions and in any other direction in-between with the full range of 360 degrees with respect to the reference location 122. Scia on col. 4, lines 22-29 discloses that as long as the input device 112 is activated (the mouse button is depressed, has been clicked, etc.) and the direction line 126 is outside the ring 124, the zoom-in operation continues until some predetermined limit is reached. FIGS. 5b and 5c show the continuous zoom-in operation on the object 108 by keeping the cursor 116 outside the ring 124. Scia's invention is not on touch-sensitive screen, but Scia on col. 5, lines 30-35 mentioned that the invention might be performed on a general-purpose personal computer programmed to perform the operations in accordance with the present invention and equipped with an input device such as light pen, touch-screen display devices. However, Delorme et al. teaches in (col. 12, lines 26-

30) the portable device is typically equipped with gray-scale "touch-screen " for text/graphic display. Such "touch-screen " can be actuated at particular points and/or series of points by touching, tapping, or sliding on the screen with a stylus, or the equivalent of a pen or pencil point. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of DeLorme into Scia since the Scia is directed to a programmable controller for positioning a cursor at a preselected position on the screen display (as a dynamic control of zoom operation). And DeLorme uses a portable device with a stylus. The combination of these two inventions would allow a user dynamically controlling of zoom operation on a portable device, because such modification would correspond to the mapping information performed by the user engaged in the process of finding his/her location, and would thereby aid the user.

2. Claim 2.

"The system of claim 1, wherein said zoom action comprises an enlargement of said image on said screen about said indicated point", Scia in Figs. 5b-5c illustrates and enlargement of an image on screen.

3. Claim 3.

"The system of claim 1, wherein said zoom action comprises a reduction of said image on said screen about said indicated point", Scia in Figs. 4a-4b illustrates and reduction of an image on screen.

4. Claim 4.

"The system of claim 1, wherein said zoom means continually monitors the position of said stylus on said screen, and wherein, on movement of said stylus across said screen, said zoom

means alters the center of said zoom action so that the center of said zoom action follows points on the screen traced by said stylus", Scia in Fig. 3 illustrates the limitation of the claim 4. And also see rejection of claim 1. Delorme teaches in (col. 44, lines 1-5) the user can manipulate the cursor position on the map display with the mouse, arrow keys or other means in order to re-center the map display, causing it to shift or pan laterally to a new location centered on a different latitude and longitude.

5. Claim 5.

"The system of claim 1, wherein said image is the graphical form of a mathematical object wherein a mathematical object comprises at least one of a mathematical function or a mathematical relation having a symbolic formula, and wherein said generating means includes means for generating said graphical form of said mathematical object", Scia in Figs. 1 and 3 illustrates graphical form of mathematical object (circle, triangle).

6. Claim 6.

"A method of manipulating an image on a touch-sensitive screen using a stylus, said method comprising the steps of: displaying said image on said screen; detecting an instruction to perform a zoom action on said image; detecting a point of contact of said stylus on said screen; setting a center of said zoom action at said detected point of contact of said stylus on said screen; and performing said zoom action on said image on said screen using said set center of zoom; and repeating said step of performing said zoom action until it is detected that said stylus has been removed from contact with said screen", Scia on col. 5, lines 29-34 discloses that the operations may be performed on a general-purpose personal computer programmed to perform the operations in accordance with the present invention and equipped with an input device such

as a mouse, light-pen, touch-screen display, remote control device, etc., and a display monitor. Scia on col. 1, lines 22-25 discloses that is well known that via the user interface the user can, for example, view, manipulate, etc. images and graphical objects on a display screen via an input device such a mouse, light pen, keyboard, joystick, etc. And also Scia on col. 5, lines 14-18 discloses the conventional technique that provides a one-button, single operation that can be performed using the input device 112. The above-described dynamic control of direction and speed in zooming-in/out further enhances the graphical user interface. Scia in Fig. 3, illustrates that the cursor 116 is located substantially near or at the reference location 122. While holding the mouse button depressed (or alternatively, by clicking on the mouse button), the user can move the cursor 116 away from the reference location 122 in any direction on the display screen 102. For example, by operating the input device 112, the cursor 116 can be moved in north, south, east and west directions and in any other direction in-between with the full range of 360 degrees with respect to the reference location 122. Scia on col. 4, lines 22-29 discloses that as long as the input device 112 is activated (the mouse button is depressed, has been clicked, etc.) and the direction line 126 is outside the ring 124, the zoom-in operation continues until some predetermined limit is reached. FIGS. 5b and 5c show the continuous zoom-in operation on the object 108 by keeping the cursor 116 outside the ring 124. Scia's invention is not on touch-sensitive screen, but Scia on col. 5, lines 30-35 mentioned that the invention might be performed on a general-purpose personal computer programmed to perform the operations in accordance with the present invention and equipped with an input device such as light pen, touch-screen display devices. However, Delorme et al. teaches in (col. 12, lines 26-30) the portable device is typically equipped with gray-scale "touch-screen " for text/graphic display.

Such "touch-screen " can be actuated at particular points and/or series of points by touching, tapping, or sliding on the screen with a stylus, or the equivalent of a pen or pencil point. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of DeLorme into Scia since the Scia is directed to a programmable controller for positioning a cursor at a preselected position on the screen display (as a dynamic control of zoom operation). And DeLorme uses a portable device with a stylus. The combination of these two inventions would allow a user dynamically controlling of zoom operation on a portable device, because such modification would correspond to the mapping information performed by the user engaged in the process of finding his/her location, and would thereby aid the user.

7. Claim 7.

"The method of claim 6, wherein said zoom action is an enlargement of said image on said screen", Scia in Figs. 5b-5c illustrates and enlargement of an image on screen.

8. Claim 8.

"The method of claim 6, wherein said zoom action is a reduction of said image on said screen", Scia in Figs. 4a-4b illustrates and reduction of an image on screen.

9. Claim 9.

"The method of claim 6, including the step of monitoring the position of said stylus on said screen and changing said center of said zoom action in accordance with movement of said stylus across said screen", Scia in Fig. 3 illustrates the limitation of the claim 4. And also see rejection of claim 6.

10. Claim 10.

"The method of claim 6, wherein said image is the graphical form of a mathematical object, and wherein said step of displaying an image on said screen includes the step of generating said graphical form of said mathematical object", Scia in Figs. 1 and 3 illustrates graphical form of mathematical object (circle, triangle).

11. Claim 11.

"Computer software for manipulating an image on a screen using a stylus and a touch-screen, wherein the software includes: a software component for displaying the image on the screen; and a software component for conducting a zoom action on the image on the screen, said zoom action software component detecting a point indicated by the stylus on the screen and repeatedly performing a zoom action on the image on the screen using the detected point as the center of the zoom action until the stylus is determined to have been removed from the screen", Scia on col. 5, lines 29-34 discloses that the operations may be performed on a general-purpose personal computer programmed to perform the operations in accordance with the present invention and equipped with an input device such as a mouse, light-pen, touch-screen display, remote control device, etc., and a display monitor. Scia on col. 1, lines 22-25 discloses that is well known that via the user interface the user can, for example, view, manipulate, etc. images and graphical objects on a display screen via an input device such a mouse, light pen, keyboard, joystick, etc. And also Scia on col. 5, lines 14-18 discloses the conventional technique that provides a one-button, single operation that can be performed using the input device 112. The above-described dynamic control of direction and speed in zooming-in/out further enhances the graphical user interface. Scia in Fig. 3, illustrates that the cursor 116 is located substantially near or at the reference location 122. While holding the mouse button depressed (or alternatively, by clicking

on the mouse button), the user can move the cursor 116 away from the reference location 122 in any direction on the display screen 102. For example, by operating the input device 112, the cursor 116 can be moved in north, south, east and west directions and in any other direction in-between with the full range of 360 degrees with respect to the reference location 122. Scia on col. 4, lines 22-29 discloses that as long as the input device 112 is activated (the mouse button is depressed, has been clicked, etc.) and the direction line 126 is outside the ring 124, the zoom-in operation continues until some predetermined limit is reached. FIGS. 5b and 5c show the continuous zoom-in operation on the object 108 by keeping the cursor 116 outside the ring 124. Scia's invention is not on touch-sensitive screen, but Scia on col. 5, lines 30-35 mentioned that the invention might be performed on a general-purpose personal computer programmed to perform the operations in accordance with the present invention and equipped with an input device such as light pen, touch-screen display devices. However, Delorme et al. teaches in (col. 12, lines 26-30) the portable device is typically equipped with gray-scale "touch-screen " for text/graphic display. Such "touch-screen " can be actuated at particular points and/or series of points by touching, tapping, or sliding on the screen with a stylus, or the equivalent of a pen or pencil point. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of DeLorme into Scia since the Scia is directed to a programmable controller for positioning a cursor at a preselected position on the screen display (as a dynamic control of zoom operation). And DeLorme uses a portable device with a stylus. The combination of these two inventions would allow a user dynamically controlling of zoom operation on a portable device, because such modification would correspond to the

mapping information performed by the user engaged in the process of finding his/her location, and would thereby aid the user.

12. Claim 12.

"A data-processing system for manipulating an image, said system comprising: display means for displaying said image; indicating means for indicating a point on said display means; and generating means for generating an image on said display means, said generating means including a zoom means for conducting a zoom action on said image on said display means; wherein, when said zoom means is activated, said zoom means determines when said indicating means is indicating to a point on said screen, and sets said indicated point as a zoom center; and wherein said zoom means repeatedly carries out said zoom action on said image on said screen about said zoom center until it is detected that said indicating means has stopped indicating to said point", Scia on col. 5, lines 29-34 discloses that the operations may be performed on a general-purpose personal computer programmed to perform the operations in accordance with the present invention and equipped with an input device such as a mouse, light-pen, touch-screen display, remote control device, etc., and a display monitor. Scia on col. 1, lines 22-25 discloses that is well known that via the user interface the user can, for example, view, manipulate, etc. images and graphical objects on a display screen via an input device such a mouse, light pen, keyboard, joystick, etc. And also Scia on col. 5, lines 14-18 discloses the conventional technique that provides a one-button, single operation that can be performed using the input device 112. The above-described dynamic control of direction and speed in zooming-in/out further enhances the graphical user interface. Scia in Fig. 3, illustrates that the cursor 116 is located substantially near or at the reference location 122. While holding the mouse button depressed (or

alternatively, by clicking on the mouse button), the user can move the cursor 116 away from the reference location 122 in any direction on the display screen 102. For example, by operating the input device 112, the cursor 116 can be moved in north, south, east and west directions and in any other direction in-between with the full range of 360 degrees with respect to the reference location 122. Scia on col. 4, lines 22-29 discloses that as long as the input device 112 is activated (the mouse button is depressed, has been clicked, etc.) and the direction line 126 is outside the ring 124, the zoom-in operation continues until some predetermined limit is reached. FIGS. 5b and 5c show the continuous zoom-in operation on the object 108 by keeping the cursor 116 outside the ring 124. Scia's invention is not on touch-sensitive screen, but Scia on col. 5, lines 30-35 mentioned that the invention might be performed on a general-purpose personal computer programmed to perform the operations in accordance with the present invention and equipped with an input device such as light pen, touch-screen display devices. However, Delorme et al. teaches in (col. 12, lines 26-30) the portable device is typically equipped with gray-scale "touch-screen " for text/graphic display. Such "touch-screen " can be actuated at particular points and/or series of points by touching, tapping, or sliding on the screen with a stylus, or the equivalent of a pen or pencil point. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of DeLorme into Scia since the Scia is directed to a programmable controller for positioning a cursor at a preselected position on the screen display (as a dynamic control of zoom operation). And DeLorme uses a portable device with a stylus. The combination of these two inventions would allow a user dynamically controlling of zoom operation on a portable device, because such modification would correspond

to the mapping information performed by the user engaged in the process of finding his/her location, and would thereby aid the user.

13. Claim 13.

"The system of claim 12, wherein said zoom means determines whether said indicating means moves whilst continuing to indicate to a point on said screen, and wherein said zoom means changes said zoom center to track the points indicated by said indicating means during any such movement of said indicating means", Scia in Fig. 3 illustrates the limitation of the claim 4. And also see rejection of claim 1. Delorme teaches in (col. 44, lines 1-5) the user can manipulate the cursor position on the map display with the mouse, arrow keys or other means in order to re-center the map display, causing it to shift or pan laterally to a new location centered on a different latitude and longitude.

14. Claim 14.

"A data-processing method for the manipulation of an image on a screen, said method comprising the steps of: displaying said image on said screen; detecting an instruction to perform a zoom action on said image; detecting a point on said screen indicated at by an indicating means; setting a center of said zoom action at said indicated point; and conducting said zoom action on said image on said screen about said set center of zoom; and repeating said step of conducting said zoom action until it is detected that said indicating means no longer indicates to said point", Scia on col. 5, lines 29-34 discloses that the operations may be performed on a general-purpose personal computer programmed to perform the operations in accordance with the present invention and equipped with an input device such as a mouse, light-pen, touch-screen display, remote control device, etc., and a display monitor. Scia on col. 1, lines 22-25 discloses

that is well known that via the user interface the user can, for example, view, manipulate, etc. images and graphical objects on a display screen via an input device such a mouse, light pen, keyboard, joystick, etc. And also Scia on col. 5, lines 14-18 discloses the conventional technique that provides a one-button, single operation that can be performed using the input device 112. The above-described dynamic control of direction and speed in zooming-in/out further enhances the graphical user interface. Scia in Fig. 3, illustrates that the cursor 116 is located substantially near or at the reference location 122. While holding the mouse button depressed (or alternatively, by clicking on the mouse button), the user can move the cursor 116 away from the reference location 122 in any direction on the display screen 102. For example, by operating the input device 112, the cursor 116 can be moved in north, south, east and west directions and in any other direction in-between with the full range of 360 degrees with respect to the reference location 122. Scia on col. 4, lines 22-29 discloses that as long as the input device 112 is activated (the mouse button is depressed, has been clicked, etc.) and the direction line 126 is outside the ring 124, the zoom-in operation continues until some predetermined limit is reached. FIGS. 5b and 5c show the continuous zoom-in operation on the object 108 by keeping the cursor 116 outside the ring 124. Scia's invention is not on touch-sensitive screen, but Scia on col. 5, lines 30-35 mentioned that the invention might be performed on a general-purpose personal computer programmed to perform the operations in accordance with the present invention and equipped with an input device such as light pen, touch-screen display devices. However, Delorme et al. teaches in (col. 12, lines 26-30) the portable device is typically equipped with gray-scale "touch-screen " for text/graphic display. Such "touch-screen " can be actuated at particular points and/or series of points by touching, tapping, or sliding on the screen with a stylus, or the equivalent of a

pen or pencil point. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of DeLorme into Scia since the Scia is directed to a programmable controller for positioning a cursor at a preselected position on the screen display (as a dynamic control of zoom operation). And DeLorme uses a portable device with a stylus. The combination of these two inventions would allow a user dynamically controlling of zoom operation on a portable device, because such modification would correspond to the mapping information performed by the user engaged in the process of finding his/her location, and would thereby aid the user.

15. Claim 15.

"The method of claim 14, including the steps of: determining whether said indicating means moves whilst continuing to indicate to points on said screen; and changing said zoom center to track the points indicated by said indicating means during any such movement of said indicating means", Scia in Fig. 3 illustrates the limitation of the claim 4. And also see rejection of claim 1. Delorme teaches in (col. 44, lines 1-5) the user can manipulate the cursor position on the map display with the mouse, arrow keys or other means in order to re-center the map display, causing it to shift or pan laterally to a new location centered on a different latitude and longitude.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A Amini whose telephone number is 703-605-4248. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 703-305-4713. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-8705 for regular communications and 703-746-8705 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Javid A Amini
Examiner
Art Unit 2672

Javid Amini
November 25, 2003

JEFFERY BRIER
PRIMARY EXAMINER